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REMARKS / DISCUSSION OF ISSUES

The present amendment is submitted in response to the Office Action mailed June 22, 2009, Claims 1-13 remain in this application. In view of the remarks to follow, reconsideration and allowance of this application are respectfully requested.

Interview Summary

Applicants appreciate the courtesy granted to Applicant's attorney, Michael A. Scaturro (Reg. No. 51,356), during a telephonic interview conducted on Monday, September 21, 2009. During the telephonic interview, Applicant's attorney inquired about the Khan reference with regard to the data processing circuit in apparatus claim 1. Upon reviewing the Khan reference, the Examiner tentatively stated that if the claim were amended to read, "A data processing circuit on an integrated circuit", or similar language, it would overcome the current ground of rejection. Applicant's attorney also presented dependent claim 5 and inquired if the limitations of claim 5 were included in claim 1, would the case be allowable. The Examiner replied that since dependent claim 5 was not directly dependent from claim 1, but instead depends from claim 4, which in turn depends from claim 3, the Examiner noted that in the Office Action, claims 3-10 were objected to but contained potentially allowable subject matter due to second claim limitation of claim 3. Specifically a "crossing time slot" and its further limitations. The Examiner also conceded that claim 3 is tentatively allowable if it was included with all its limitations in claim 1. Claims 11 and 12 regard similar issues with regard to a "crossing time slot". The Examiner recommends that the Applicant's Attorney file a formal response so that the Examiner may consider these issues fully. No agreement was reached.

Allowable Subject Matter

Applicant wishes to thank the Examiner for indicating that Claims 3-10, 12 and 13 are objected to but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Objection to the Specification

In the Office Action, the abstract of the disclosure was objected to because it exceeds

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150 words. By means of the present amendment, the current Abstract has been amended as shown in the enclosed Replacement Abstract in a manner which is believed to overcome the objection. Withdrawal of the objection is respectfully requested.

In the Office Action, the Specification was objected to for failing to include section headings. Applicants respectfully declines to add the headings as they are not required in accordance with MPEP §608.01(a) and requests withdrawal of the objection to the specification.

Claim Rejections under 35 USC 103

The Office has rejected claims 1, 2 and 11 under 35 U.S.C. §103(a), as being unpatentable over U.S. Patent 7,206,280 ("Khan") in view of U.S. Patent Application No. 2004/0052269 ("Hooper") and U.S. Patent Application No. 2006/0087969 ("Santiago"). Applicant respectfully traverses the rejections.

Claims 1-2 are Allowable

The cited portions of Khan and Hooper, individually or in combination, fail to disclose or suggest the specific combination of claim 1. For example, the cited portions of Khan fail to disclose or suggest, "*A data processing circuit comprising:a network (12) that is operable in successive time-slots; a plurality of data processing units (10) interconnected by the network (12)*", as recited in claim 1 (Emphasis Added). In contrast to claim 1, Khan discloses a method which implements an Automatic Repeat Request (ARQ) used with Incremental Retransmission (IR) that allows receiving equipment to recover in a relatively short period of time. See Khan, Summary. The Office cites Khan at column 1, lines 32-35 for allegedly teaching this feature of claim 1. Applicants respectfully submit that Kahn is non-analagous art in that Khan recites at col. 1, lines 32-35, "The air interface is used for the exchange of information between a mobile (e.g., cell phone) and a base station or other communication system equipment." Applicants respectfully point out that the invention is directed to **a data processing circuit contained on an integrated circuit**. In other words, **a circuit of data processing units coupled by an interconnecting network** where all of the elements being **integrated together in an integrated circuit**. Various aspects of the data processing circuit

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of the invention are illustrated in Figs. 1-3 of the specification. For example, Fig. 1 illustrates a data processing circuit comprising a plurality of data processing units 10 and a network 12, integrated together in an integrated circuit. Fig. 2 is a more detailed illustration of a path through a network, connecting a pair of data processing units. Clearly, the network of the invention is embodied within an integrated circuit and does not constitute a wireless network interconnecting remote transmitters and receivers over a geographical distance, as taught in Khan. Fig. 3 illustrates a node circuit which is an element of the interconnecting network integrated within the integrated circuit. Applicants respectfully submit that because Khan is non-analogous art, it does not teach or suggest a data processing circuit, i.e., **a circuit of data processing units coupled by an interconnecting network**. Instead, Khan discloses a conventional communication system that wirelessly interconnects remote transmitters and receivers over a geographical distance.

Independent Claim 1 has been amended herein to better define Applicant's invention over Kahn. Claim 1 now recites limitations and/or features which are not disclosed by Kahn. In accordance with the Examiner's suggestion during the telephonic interview conducted on Monday, September 21, 2009, Claim 1 has been amended herein to recite in part: "*A data processing circuit contained on an integrated circuit, comprising: ....*" As indicated by the Examiner during the telephonic interview, the above or similar language would overcome the current ground of rejection.

Independent Claim 1 has been further amended herein to better define Applicant's invention over the secondary reference, Hooper. Claim 1 now recites limitations and/or features which are not disclosed by Hooper. In particular, Claim 1, as amended, now recites in part: "a *network (12) contained on the integrated circuit, that is operable in successive time-slots*". It is respectfully submitted that at least the limitations and/or features of Claim 1 which are underlined above is not anticipated by the disclosure of Hooper. For reasons similar to that described above with respect to Khan, Hooper also represent non-analogous art that is not directed to **a data processing circuit contained on an integrated circuit,** but is instead directed to computer networking, such as ATM networking. See Hooper, par. [0002].

Accordingly, Hooper fails to disclose or suggest, "*a data processing circuit contained on an integrated circuit*", as recited in claim 1, as amended.

Further, the cited portions of Hooper fail to disclose or suggest, "*each stream comprising messages that occupy shareable resources (20) in the network (12) in a periodically repeating selection of successive time-slots, a period of repetition (P) being the same for all the streams; node circuits (22) in the network (12), the node circuits (22) being arranged to forward the messages along multi-node paths through the network (12), **each particular stream being assigned a respective stream specific path along which the node circuits (22) forward all messages of the particular stream**, the node circuits (22) being arranged to decide whether to forward or discard each message dependent on a measure of seniority of the message in its particular stream, each particular node circuit (22) being arranged to prevent forwarding of a more junior message in the particular stream for which insufficient resources (20) are left because of forwarding of a more senior message from another stream from the particular node circuit (22)*", as recited in claim 1 [Emphasis Added]. In contrast to claim 1, Hooper merely discloses a router/traffic shaper 40 as a networking device including a main memory 42a, storage 42b, one or more processors 42c, network interface 42d, and bus 42e interconnecting components 42a-d. Main memory 42a and storage 42b store computing instructions and data readable by a processor 42c. The router/traffic shaper 40 is a networking device conforming to architecture standards for the Intel IXP series of network processors, manufactured by Intel Corporation, Santa Clara, Calif. Hooper describes, by way of example, a processor 42c, which is an Intel IXP 1200, and registers 48 each holding 32 bits. As is well known in the art, such devices do not assign data streams a respective stream path along which **the node circuits forward all messages of the particular stream**. In contrast to Hooper, all messages of a stream are sent via the same path. Thus, the fact that an initial message has managed to travel along the path starting in a specific time-slot can be used to **seize access to the data conductors along that path for subsequent messages**, without fear of collision with older streams. The specification teaches that many ways can be used to ensure use of the same path. For example, the messages may specify the path, so that the nodes will route the messages dependent on the specified path. As another example, the node circuits may be arranged to route the messages along a

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reproducible path, for example by retaining information about the selected route for a previous message from the same stream, or by using a predetermined route from a given source to a given destination. When the messages specify the path, the path specification may be selected in advance by the transmitting data processing unit 10a, or it may be derived from a path selected by the node circuits for the initial message of the stream. In the latter case information about the path may be added to the initial message as it travels along the path, and the node circuit may report back this information in the precursor messages, so that the transmitting data processing unit 10a can include a specification in subsequent messages.

Hence, claim 1 is allowable. Claim 2 depends from independent Claim 1, which Applicants have shown to be allowable. Accordingly, claim 2 is also allowable, at least by virtue of its dependency from claim 1.
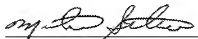
Claim 11 is allowable

Independent Claim 11 recites similar subject matter as Independent Claim 1 and therefore contains the limitations of Claim 1. Hence, for at least the same reasons given for Claims 1, Claim 11 is believed to recite statutory subject matter under 35 USC 102(b).

Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1-13 are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Mike Belk, Esq., Intellectual Property Counsel, Philips Electronics North America, at 914-945-6000.

Respectfully submitted,

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